SEQUENCE LISTING

```
<110>   Commonwealth Scientific and Industrial Research Organisation
<120>   Expression system
<130>   13447210
<160>   40
<170>   PatentIn version 3.2

<210>   1
<211>   30
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   1
Met Lys Lys Arg Arg Val Val Asn Ser Val Leu Leu Leu Leu Leu Leu
1               5                   10                  15
Ala Ser Ala Leu Ala Leu Thr Val Ala Pro Met Ala Lys Ala
            20                  25                  30


<210>   2
<211>   46
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   2

Met Glu Ala Arg Met Thr Gly Arg Arg Lys Val Thr Arg Arg Asp Ala
1               5                   10                  15
Met Ala Asp Ala Ala Arg Ala Val Gly Val Ala Cys Leu Gly Gly Phe
            20                  25                  30
Ser Leu Ala Ala Leu Val Arg Thr Ala Ser Pro Val Asp Ala
            35                  40                  45


<210>   3
<211>   41
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   3
Met Ser Arg Ser Ala Lys Pro Gln Asn Gly Arg Arg Arg Phe Leu Arg
1               5                   10                  15
Asp Val Val Arg Thr Ala Gly Gly Leu Ala Ala Val Gly Val Ala Leu
            20                  25                  30
Gly Leu Gln Gln Gln Thr Ala Arg Ala
            35                  40


<210>   4
<211>   27
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   4
Met Thr Trp Ser Arg Arg Gln Phe Leu Thr Gly Val Gly Val Leu Ala
1               5                   10                  15
Ala Val Ser Gly Thr Ala Gly Arg Val Val Ala
            20                  25
```

```
<210>   5
<211>   27
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   5
Met Asp Arg Arg Arg Phe Leu Thr Leu Leu Gly Ser Ala Gly Leu Thr
1                   5                   10                  15
Ala Thr Val Ala Thr Ala Gly Thr Ala Lys Ala
                20                  25


<210>   6
<211>   37
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   6
Met Ser Glu Lys Asp Lys Met Ile Thr Arg Arg Asp Ala Leu Arg Asn
1                   5                   10                  15
Ile Ala Val Val Val Gly Ser Val Ala Thr Thr Thr Met Met Gly Val
                20                  25                  30
Gly Val Ala Asp Ala
                35


<210>   7
<211>   34
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   7
Met Gln Ile Val Asn Leu Thr Arg Arg Gly Phe Leu Lys Ala Ala Cys
1                   5                   10                  15
Val Val Thr Gly Gly Ala Leu Ile Ser Ile Arg Met Thr Gly Lys Ala
                20                  25                  30
Val Ala


<210>   8
<211>   45
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   8
Met Asn Asn Glu Glu Thr Phe Tyr Gln Ala Met Arg Arg Gln Gly Val
1                   5                   10                  15
Thr Arg Arg Ser Phe Leu Lys Tyr Cys Ser Leu Ala Ala Thr Ser Leu
                20                  25                  30
Gly Leu Gly Ala Gly Met Ala Pro Lys Ile Ala Trp Ala
                35                  40                  45


<210>   9
<211>   48
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   9
Met Ser Thr Gly Thr Thr Asn Leu Val Arg Thr Leu Asp Ser Met Asp
1                   5                   10                  15
```

SUBSTITUTE SHEET (RULE 26)
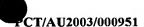
```
         Phe Leu Lys Met Asp Arg Arg Thr Phe Met Lys Ala Val Ser Ala Leu
                      20              25              30
         Gly Ala Thr Ala Phe Leu Gly Thr Tyr Gln Thr Glu Ile Val Asn Ala
                      35              40              45
  5
         <210>  10
         <211>  50
         <212>  PRT
         <213>  Artificial Sequence
  10     <220>
         <223>  signal peptide
         <400>  10
         Met Lys Cys Tyr Ile Gly Arg Gly Lys Asn Gln Val Glu Glu Arg Leu
         1               5               10              15
  15     Glu Arg Arg Gly Val Ser Arg Arg Asp Phe Met Lys Phe Cys Thr Ala
                      20              25              30
         Val Ala Val Ala Met Gly Met Gly Pro Ala Phe Ala Pro Lys Val Ala
                      35              40              45
         Glu Ala
  20        50


         <210>  11
         <211>  26
         <212>  PRT
  25     <213>  Artificial Sequence
         <220>
         <223>  signal sequence
         <400>  11
         Met Asn Arg Arg Asn Phe Ile Lys Ala Ala Ser Cys Gly Ala Leu Leu
  30     1               5               10              15
         Thr Gly Ala Leu Pro Ser Val Ser His Ala
                      20              25


         <210>  12
  35     <211>  44
         <212>  PRT
         <213>  Artificial Sequence
         <220>
         <223>  signal sequence
  40     <400>  12
         Met Ser His Ala Asp Glu His Ala Gly Asp His Gly Ala Thr Arg Arg
         1               5               10              15
         Asp Phe Leu Tyr Tyr Ala Thr Ala Gly Ala Gly Thr Val Ala Ala Gly
                      20              25              30
  45     Ala Ala Ala Trp Thr Leu Val Asn Gln Met Asn Pro
                      35              40


         <210>  13
  50     <211>  44
         <212>  PRT
         <213>  Artificial Sequence
         <220>
         <223>  signal sequence
  55     <400>  13
         Met Thr Gln Ile Ser Gly Ser Pro Asp Val Pro Asp Leu Gly Arg Arg
         1               5               10              15
         Gln Phe Met Asn Leu Leu Thr Phe Gly Thr Ile Thr Gly Val Ala Ala
                      20              25              30
         Gly Ala Leu Tyr Pro Ala Val Lys Tyr Leu Ile Pro
  60                  35              40
```

```
<210>  14
<211>  32
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  14
Met Asp Arg Arg Thr Phe Leu Arg Leu Tyr Leu Leu Val Gly Ala Ala
1               5                   10                  15
Ile Ala Val Ala Pro Val Ile Lys Pro Ala Leu Asp Tyr Val Gly Tyr
                20                  25                  30


<210>  15
<211>  42
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  15
Met Thr Lys Leu Ser Gly Gln Glu Leu His Ala Glu Leu Ser Arg Arg
1               5                   10                  15
Ala Phe Leu Ser Tyr Thr Ala Ala Val Gly Ala Leu Gly Leu Cys Gly
                20                  25                  30
Thr Ser Leu Leu Ala Gln Gly Ala Arg Ala
            35                  40


<210>  16
<211>  31
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  16
Met Thr Leu Thr Arg Arg Glu Phe Ile Lys His Ser Gly Ile Ala Ala
1               5                   10                  15
Gly Ala Leu Val Val Thr Ser Ala Ala Pro Leu Pro Ala Trp Ala
                20                  25                  30


<210>  17
<211>  31
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  17
Met Thr Ile Ser Arg Arg Asp Leu Leu Lys Ala Gln Ala Ala Gly Ile
1               5                   10                  15
Ala Ala Met Ala Ala Asn Ile Pro Leu Ser Ser Gln Ala Pro Ala
                20                  25                  30


<210>  18
<211>  32
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  18
Met Ser Glu Ala Leu Ser Gly Arg Gly Asn Asp Arg Arg Lys Phe Leu
1               5                   10                  15
Lys Met Ser Ala Leu Ala Gly Val Ala Gly Val Ser Gln Ala Val Gly
                20                  25                  30
```

```
        <210>  19
        <211>  45
        <212>  PRT
        <213>  Artificial Sequence
5       <220>
        <223>  signal sequence
        <400>  19
        Met Lys Thr Lys Ile Pro Asp Ala Val Leu Ala Ala Glu Val Ser Arg
        1               5                   10                  15
10      Arg Gly Leu Val Lys Thr Thr Ala Ile Gly Gly Leu Ala Met Ala Ser
                        20                  25                  30
        Ser Ala Leu Thr Leu Pro Phe Ser Arg Ile Ala His Ala
                  35                    40                45

15      <210>  20
        <211>  35
        <212>  PRT
        <213>  Artificial Sequence
        <220>
20      <223>  signal sequence
        <400>  20
        Met Ser Asn Phe Asn Gln Ile Ser Arg Arg Asp Phe Val Lys Ala Ser
        1               5                   10                  15
        Ser Ala Gly Ala Ala Leu Ala Val Ser Asn Leu Thr Leu Pro Phe Asn
25                  20                  25                  30
        Val Met Ala
                  35


        <210>  21
30      <211>  30
        <212>  PRT
        <213>  Artificial Sequence
        <220>
        <223>  signal sequence
35      <400>  21
        Met Ser Ile Ser Arg Arg Ser Phe Leu Gln Gly Val Gly Ile Gly Cys
        1               5                   10                  15
        Ser Ala Cys Ala Leu Gly Ala Phe Pro Pro Gly Ala Leu Ala
                      20                  25                  30
40
        <210>  22
        <211>  37
        <212>  PRT
        <213>  Artificial Sequence
45      <220>
        <223>  signal sequence
        <400>  22
        Met Lys Thr Val Leu Pro Ser Val Pro Glu Thr Val Arg Leu Ser Arg
        1               5                   10                  15
50      Arg Gly Phe Leu Val Gln Ala Gly Thr Ile Thr Cys Ser Val Ala Phe
                      20                  25                  30
        Gly Ser Val Pro Ala
                  35

55      <210>  23
        <211>  44
        <212>  PRT
        <213>  Artificial Sequence
        <220>
60      <223>  signal sequence
        <400>  23
        Met Gly Arg Leu Asn Arg Phe Arg Leu Gly Lys Asp Gly Arg Arg Glu
        1               5                   10                  15
```

```
        Gln Ala Ser Leu Ser Arg Arg Gly Phe Leu Val Thr Ser Leu Gly Ala
                    20                  25                  30
        Gly Val Met Phe Gly Phe Ala Arg Pro Ser Ser Ala
                    35              40
5
        <210>  24
        <211>  50
        <212>  PRT
        <213>  Artificial Sequence
10      <220>
        <223>  signal sequence
        <400>  24
        Met Ser Asp Lys Asp Ser Lys Asn Thr Pro Gln Val Pro Glu Lys Leu
        1               5                   10                  15
15      Gly Leu Ser Arg Arg Gly Phe Leu Gly Ala Ser Ala Val Thr Gly Ala
                    20                  25                  30
        Ala Val Ala Ala Thr Ala Leu Gly Gly Ala Val Met Thr Arg Glu Ser
                    35                  40                  45
        Trp Ala
20          50


        <210>  25
        <211>  32
        <212>  PRT
25      <213>  Artificial Sequence
        <220>
        <223>  signal sequence
        <400>  25
        Met Glu Ser Arg Thr Ser Arg Arg Thr Phe Val Lys Gly Leu Ala Ala
30      1               5                   10                  15
        Ala Gly Val Leu Gly Gly Leu Gly Leu Trp Arg Ser Pro Ser Trp Ala
                    20                  25                  30


        <210>  26
35      <211>  27
        <212>  PRT
        <213>  Artificial Sequence
        <220>
        <223>  signal sequence
40      <400>  26
        Met Ser Leu Ser Arg Arg Gln Phe Ile Gln Ala Ser Gly Ile Ala Leu
        1               5                   10                  15
        Cys Ala Gly Ala Val Pro Leu Lys Ala Ser Ala
                    20                  25
45
        <210>  27
        <211>  30
        <212>  PRT
        <213>  Artificial Sequence
50      <220>
        <223>  signal sequence
        <400>  27
        Met Thr Leu Asn Arg Arg Asp Phe Ile Lys Thr Ser Gly Ala Ala Val
        1               5                   10                  15
55      Ala Ala Val Gly Ile Leu Gly Phe Pro His Leu Ala Phe Gly
                    20                  25                  30
```

```
<210>  28
<211>  45
<212>  PRT
<213>  Artificial Sequence
<220>
<223>  signal sequence
<400>  28
Met Thr Asp Ser Arg Ala Asn Arg Ala Asp Ala Thr Arg Gly Val Ala
1               5                   10                  15
Ser Val Ser Arg Arg Arg Phe Leu Ala Gly Ala Gly Leu Thr Ala Gly
                20                  25                  30
Ala Ile Ala Leu Ser Ser Met Ser Thr Ser Ala Ser Ala
                35                  40                  45


<210>  29
<211>  1155
<212>  DNA
<213>  Agrobacterium radiobacter
<400>  29
atgcaaacga gaagagatgc acttaagtct gcggccgcaa taactctgct cggcggcttg    60
gctgggtgtg caagcatggc ccgaccaatc ggtacaggcg atctgattaa tactgttcgc   120
ggccccattc cagtttcgga agcgggcttc acactgaccc atgagcatat ctgcggcagt   180
tcggcgggat tcctacgtgc gtggccggag tttttcggta gccgcaaagc tctagcggaa   240
aaggctgtga gaggattacg ccatgccaga tcggctggcg tgcaaaccat cgtcgatgtg   300
tcgactttcg atatcggtcg tgacgtccgt ttattggccg aagtttcgcg gccgccgac   360
gtgcatatcg tggcggcgac tggcttatgg ttcgacccgc cactttcaat gcgaatgcgc   420
agcgtcgaag aactgaccca gttcttcctg cgtgaaatcc aacatggcat cgaagacacc   480
ggtattaggg cgggcattat caaggtcgcg accacaggga aggcgacccc ctttcaagag   540
ttggtgttaa aggcagccgc gcgggccagc ttggccaccg gtgttccggt aaccactcac   600
acgtcagcaa gtcagcgcga tggcgagcag caggcagcca tatttgaatc cgaaggtttg   660
agcccctcac gggtttgtat cggtcacagc gatgatactg acgatttgag ctacctaacc   720
ggcctcgctg cgcgcggata cctcgtcggt ttagatcgca tgccgtacag tgcgattggt   780
ctagaaggca atgcgagtga attagcgctc tttggtactc ggtcgtggca aacaagggct   840
ctcttgatca aggcgctcat cgaccgaggc tacaaggatc gaatcctcgt ctcccatgac   900
tggctgttcg ggttttcgag ctatgtcacg aacatcatgg acgtaatgga tcgcataaac   960
ccagatggaa tggccttcgt ccctctgaga gtgatcccat tcctacgaga gaagggcgtc  1020
ccgccggaaa cgctagcagg cgtaaccgtg gccaatcccg cgcggttctt gtcaccgacc  1080
gtgcgggccg tcgtgacacg atctgaaact tcccgccctg ccgcgcctat tccccgtcaa  1140
gataccgaac gatga                                                   1155


<210>  30
<211>  384
<212>  PRT
<213>  Agrobacterium radiobacter
<400>  30
Met Gln Thr Arg Arg Asp Ala Leu Lys Ser Ala Ala Ala Ile Thr Leu
1               5                   10                  15
Leu Gly Gly Leu Ala Gly Cys Ala Ser Met Ala Arg Pro Ile Gly Thr
                20                  25                  30
Gly Asp Leu Ile Asn Thr Val Arg Gly Pro Ile Pro Val Ser Glu Ala
                35                  40                  45
Gly Phe Thr Leu Thr His Glu His Ile Cys Gly Ser Ser Ala Gly Phe
        50                  55                  60
Leu Arg Ala Trp Pro Glu Phe Phe Gly Ser Arg Lys Ala Leu Ala Glu
65                  70                  75                  80
Lys Ala Val Arg Gly Leu Arg His Ala Arg Ser Ala Gly Val Gln Thr
                85                  90                  95
Ile Val Asp Val Ser Thr Phe Asp Ile Gly Arg Asp Val Arg Leu Leu
                100                 105                 110
Ala Glu Val Ser Arg Ala Ala Asp Val His Ile Val Ala Ala Thr Gly
        115                 120                 125
Leu Trp Phe Asp Pro Pro Leu Ser Met Arg Met Arg Ser Val Glu Glu
        130                 135                 140
```

```
     Leu Thr Gln Phe Phe Leu Arg Glu Ile Gln His Gly Ile Glu Asp Thr
     145             150             155             160
     Gly Ile Arg Ala Gly Ile Ile Lys Val Ala Thr Thr Gly Lys Ala Thr
                 165             170             175
  5  Pro Phe Gln Glu Leu Val Leu Lys Ala Ala Ala Arg Ala Ser Leu Ala
                 180             185             190
     Thr Gly Val Pro Val Thr Thr His Thr Ser Ala Ser Gln Arg Asp Gly
                 195             200             205
     Glu Gln Gln Ala Ala Ile Phe Glu Ser Glu Gly Leu Ser Pro Ser Arg
 10      210             215             220
     Val Cys Ile Gly His Ser Asp Asp Thr Asp Asp Leu Ser Tyr Leu Thr
     225             230             235             240
     Gly Leu Ala Ala Arg Gly Tyr Leu Val Gly Leu Asp Arg Met Pro Tyr
                 245             250             255
 15  Ser Ala Ile Gly Leu Glu Gly Asn Ala Ser Ala Leu Ala Leu Phe Gly
                 260             265             270
     Thr Arg Ser Trp Gln Thr Arg Ala Leu Leu Ile Lys Ala Leu Ile Asp
                 275             280             285
     Arg Gly Tyr Lys Asp Arg Ile Leu Val Ser His Asp Trp Leu Phe Gly
 20      290             295             300
     Phe Ser Ser Tyr Val Thr Asn Ile Met Asp Val Met Asp Arg Ile Asn
     305             310             315             320
     Pro Asp Gly Met Ala Phe Val Pro Leu Arg Val Ile Pro Phe Leu Arg
                 325             330             335
 25  Glu Lys Gly Val Pro Pro Glu Thr Leu Ala Gly Val Thr Val Ala Asn
                 340             345             350
     Pro Ala Arg Phe Leu Ser Pro Thr Val Arg Ala Val Val Thr Arg Ser
                 355             360             365
     Glu Thr Ser Arg Pro Ala Ala Pro Ile Pro Arg Gln Asp Thr Glu Arg
 30      370             375             380
```

```
     <210>  31
     <211>  28
     <212>  PRT
 35  <213>  Artificial Sequence
     <220>
     <223>  signal sequence
     <400>  31
     Met Gln Thr Arg Arg Asp Ala Leu Lys Ser Ala Ala Ala Ile Thr Leu
 40  1               5               10              15
     Leu Gly Gly Leu Ala Gly Cys Ala Ser Met Ala Arg
                 20              25
```

```
     <210>  32
 45  <211>  33
     <212>  PRT
     <213>  Artificial Sequence
     <220>
     <223>  signal sequence
 50  <400>  32
     Met Lys Lys Arg Arg Val Val Asn Ser Val Leu Leu Leu Leu Leu Leu
     1               5               10              15
     Ala Ser Ala Leu Ala Leu Thr Val Ala Pro Met Ala Phe Ala Ala Gly
                 20              25              30
 55  Ser
```

```
<210>   33
<211>   40
<212>   DNA
<213>   Artificial Sequence
<220>
<223>   oligonucleotide
<400>   33
gttcagccca tggctaaagc tgcagagcac ggatccgatc                    40


<210>   34
<211>   40
<212>   DNA
<213>   Artificial Sequence
<220>
<223>   oligonucleotide
<400>   34
gatcggatcc gtgctctgca gctttagcca tgggctgaac                    40


<210>   35
<211>   33
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   35
Met Lys Lys Arg Arg Val Val Asn Ser Val Leu Leu Leu Leu Leu
1               5                   10                  15
Ala Ser Ala Leu Ala Leu Thr Val Ala Pro Met Ala Phe Ala Ala Gly
            20                  25              30
Ser


<210>   36
<211>   33
<212>   PRT
<213>   Artificial Sequence
<220>
<223>   signal sequence
<400>   36
Met Lys Lys Arg Arg Val Val Asn Ser Val Leu Leu Leu Leu Leu Leu
1               5                   10                  15
Ala Ser Ala Leu Ala Leu Thr Val Ala Pro Met Ala Lys Ala Ala Glu
            20                  25              30
His


<210>   37
<211>   24
<212>   DNA
<213>   Artificial Sequence
<220>
<223>   oligonucleotide
<400>   37
catgtcgaca tggatcccgt cgtt                                     24


<210>   38
<211>   27
<212>   DNA
<213>   Artificial Sequence
<220>
<223>   oligonucleotide
<400>   38
catgaattct tatttttgaa ctggtaa                                  27
```

SUBSTITUTE SHEET (RULE 26)

```
     <210>  39
     <211>  33
     <212>  DNA
 5   <213>  Artificial Sequence
     <220>
     <223>  oligonucleotide
     <400>  39
     gtctaaggat ccatgaaaga agaactaaaa acc                    33
10
     <210>  40
     <211>  30
     <212>  DNA
     <213>  Artificial Sequence
15   <220>
     <223>  oligonucleotide
     <400>  40
     gtctaaaagc ttttaccagt ttagctttag                        30
```